UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

0000002

JUN 13 2000

MEMORANDUM

REPLY TO THE ATTENTION OF

SUBJECT: ACTION MEMORANDUM - Request for a Time-Critical Removal Action at the Jefferson Processing Site, Mingo Junction, Jefferson County, Ohio (Site ID #B5C2)

FROM: Thomas D. Cook, On-Scene Coordinator
Emergency Response Branch - Section 3

TO: William E. Muno, Director
Superfund Division

THRU: Richard C. Karl, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this Action memorandum is to document the need to conduct an Time-Critical removal action to mitigate an imminent and substantial threat to public health and the environment posed by the presence of hazardous substances located at the Jefferson Processing Site, Jefferson County, Ohio. The removal action involves the removal and disposal of Polychlorinated Biphenyls (PCBs) materials found in approximately 13 electrical transformers and 159 capacitors on site, with capacities ranging from 100 gallons to 500 gallons per transformer.

The Site represents a serious land, ground and surface waterway contamination hazard as a result of uncontrolled disposal of PCBs within and throughout the Site during salvaging operations for copper and other recyclable or reusable scrap metals from large electrical transformers and capacitors.

This site is not on the National Priorities List.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # Pending

The Jefferson Processing Site is located on County Road 74 (Gould Road), Mingo Junction, Jefferson County, Ohio. The geographical coordinates for the site are latitude 40° 18' 35" N and longitude 80° 40' 21" W. In Ohio, 30% of the population is low- income and 13% is minority. To meet the environmental justice (EJ) concern criteria, the area within 1 mile of the site must

have a population that's twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 60% low-income and/or 26% minority. At this site, the low-income population is 30.7% and the minority population is .90% as determined by Arcview or Landview III EJ analysis. Therefore, this site does not meet the region's EJ criteria based on the demographics as identified in "Region 5 Interim Guidelines For Identifying and Addressing a Potential EJ case, June 1998". The Site area is comprised of 61 acres which includes several structures such as smaller buildings, cooling towers, a pump building (Pumphouse), an electrical substation, a laboratory, two larger furnace/processing buildings, several settling ponds and numerous uncovered slag and baghouse dust waste-piles. The entire property on which the site is located consists of approximately 320 acres, and is located 4 miles south of Steubenville, Ohio, on the flood plain of Cross Creek. The Site is situated in a mixed rural and industrial area.

In 1958, Vanadium Corporation of America (Vanadium) established the a ferro-alloy production facility at the Site. In the 1960s, Vanadium merged with Foote Mineral Company (Foote). Foote then sold the production facility to Satralloy Inc. (Satralloy), in the mid-1970s. Vanadium, Foote, and Satralloy used chrome ore which was shipped to the site to manufacture ferro-alloys. During the ore-smelting and refining process, large quantities of slag were generated as byproducts. In 1982, Satralloy shut down the furnaces which halted ferro-alloy production. In the mid-1980s, Satralloy changed its name to Satra Concentrates, Inc. (Satra). At that time, usable chromium was recovered from the piles of low-carbon slag wastes on site through a water concentration process. Several violations were noted during a 1988 Polychlorinated Biphenyls (PCBs) Compliance Inspection conducted by OEPA at the facility. The findings of this inspection lead to a Consent Agreement and Final Order which was issued to Satralloy, Inc. in 1990. Sometime in 1993-1994, Satralloy ceased business at the Site. In 1994, Ms. Glorious purchased the site at a tax sale for $100 and began operations at the Site as Jefferson Processing. Jefferson Processing appears to have been salvaging materials and selling slag from the Site since 1994. In 1997, Ohio Environmental Protection Agency ordered Jefferson Processing and Gary Smith to conduct a cleanup of the materials in the laboratory. This Site was selected for investigation by the Emergency Response Branch based on a referral from the Ohio EPA Southeast District Resource Conservation and Recovery Act (RCRA) program office in 1991.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Paragraph (b)(2) of Part 300.415 of the National Contingency Plan lists factors to be considered when determining the appropriateness of a potential removal action at a site. The following discussion presents a summary of those factors which are applicable to the Jefferson Processing Site.

I) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

Approximately 159 capacitors and 13 PCB transformers have been located at the Jefferson Processing Site. As stated in 40 Code of Federal Regulations (CFR) Part 761: ". . .[t]he Administrator hereby finds . . . that any exposure of human beings or the environment to PCBs, as measured or detected by any scientifically acceptable analytical method, may be significant, depending upon such factors as the quantity of PCBs involved in the exposure, the likelihood of exposure to humans and the environment, and the effect of the exposure." PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater have been found by U.S. EPA to present an unreasonable risk of injury to health. Several of the transformers are labeled as containing PCBs greater than 50 ppm.

Previous vandalism has been documented at the Jefferson Processing Site. With the correct equipment, vandals could gain access into the rooms which contain the transformers. Once inside the rooms, vandals could tamper with the transformers to obtain any salvageable parts and metals. Such tampering with the transformers could cause a release of the PCB oil which is contained in them. Additionally, several transformers are in deteriorating condition and five transformers show signs of leaking on the floor or soil beneath them.

ii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;

All transformers documented on Site were labeled as containing PCBs. The potential of a release of leaking transformer oil through present floor drains does exist on Site. Several transformers were observed to be in deteriorating condition due to rusting of the cooling pipes. Further deterioration over time will potentially contribute to the likelihood of a larger release from the transformers. Five Transformers were observed to show signs of leakage on the floor or soil/gravel beneath them.

iii) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

Southeastern Ohio receives a substantial amount of rainfall during the spring and autumn seasons. Winter temperatures are normally below freezing with significant snowfall. During the autumn, winter and spring, this area is subject to freeze-thaw cycles. The rooms which contain the transformers are unheated and therefore are subject to the weather extremes as they occur in the region. Over time the weather conditions would be suspected to continue to compromise the structural integrity of the transformers parts such as valves, valve seals and the walls of the unit. Continued degradation of the structural integrity increase the threat and likelihood of a release. The rusting and potential leaking already observed can only worsen due to climate conditions.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the hazardous substances on site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COST

The purpose of this removal action is to mitigate the imminent and substantial threat posed to public health, or welfare, or the environment. Removal activities at the Site will include: identifying and disposing of the PCB contaminated electrical transformers and capacitors, conducting an extent-of-contamination survey on the entire Site. Specifically, the following removal activities are proposed:

1) Prepare a workplan that includes tasks and timeline for activities, as well as a site Health and Safety Plan.

2) Dispose of all PCB oil within transformers and capacitors, and dispose of all PCB transformers and capacitors in accordance with the Toxic Substances Control Act (TSCA) PCB Spill Policy and the PCB rules at 40 CFR Part 761.

3) Conduct an extent-of-contamination survey of the Site surface and subsurface for PCB contamination;

4) Stabilize or demolish structures on the property that represent physical hazards to workers who are conducting removal actions.

5) Any contaminated wastes transported off site will be properly treated and disposed of by a disposal facility in accordance with U.S. EPA's Off-Site Rule, (40CFR § 300.440, 58 Federal Register 49215 September 22, 1993).

6) Conduct Sampling of the Slag piles on Site and The Cross Creek adjacent to the Site.

Removal activities should require approximately 32 on-site working days to complete. The threats posed by identified hazardous waste materials meet the criteria listed in Section 300.415(b)(2) of the NCP and are consistent with any removal action which may be required.

The OSC has begun planning for provision of post-removal site control, consistent with the provisions of Section 300.415(l) of the NCP.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the site which may pose an imminent and substantial endangerment to public health and safety and the environment.

These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The detailed cleanup contractor costs are presented in Attachment 1 and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:	
Cleanup Contractor	$489,783
Contingency (20%)	97,956
Subtotal	$587,739
Start Cost	$58,369
Total Extramural Cost	$646,105
Extramural Contingency (20%)	$129,221
TOTAL, EXTRAMURAL COSTS	$775,326
INTRAMURAL COSTS:	
U.S. EPA Direct Cost ($30 x 200 Regional Hours + 20 HQ Hours)	$ 6,600
U.S. EPA Indirect Costs ($65 x 200 Regional Hours)	$13,000
TOTAL, INTERMURAL COSTS	$ 19,600
TOTAL REMOVAL PROJECT CEILING	$794,926

All applicable or relevant and appropriate requirements (ARARs) will be complied with to the extent practicable. Removal activities performed pursuant to this Action Memorandum shall, to the extent practicable considering the exigencies of the situation, attain ARARs identified by the OEPA. The OSC has mantained coordination with Melody Stuart of OEPA, concerning this Site.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed or non-action may result in the increased likelihood of direct contact threat to human or wildlife populations accessing the site.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential Addendum

IX. RECOMMENDATIONS

This decision document represents the selected removal action for the Jefferson Processing Site, Mingo Junction, Jefferson County, Ohio, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative record for the site. Conditions at the site meet the NCP Section 300.415 (b)(2) criteria for a removal and I recommend your approval of this proposed removal action. Total project ceiling, if approved, will be $794,926. Of this, an estimated $775,326 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVAL: Wm. E. Muno DATE: 6/13/2000
Director, Superfund Division

DISAPPROVAL: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum
Attachments:

1. Region 5 Superfund EJ Analysis
2. Index to the Administrative Record

cc: K. Mould, U.S. EPA, 5202-G
M. Chezik, U.S. Dept. of the Interior, **w/o Enf. Addendum**
D. Schregardus, OEPA, Columbus, **w/o Enf. Addendum**

JEFFERSON PROCESSING SITE
MINGO JUNCTION, JEFFERSON COUNTY, OHIO
AR ORIGINAL

DOCUMENT #2
"Action Memorandum: Request for a Time-Critical Removal Action at the Jefferson Processing Site"

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REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

JEFFERSON PROCESSING SITE
MINGO JUNCTION, JEFFERSON COUNTY, OHIO
AR ORIGINAL

DOCUMENT #2
"Action Memorandum: Request for a Time-Critical Removal Action at the Jefferson Processing Site"

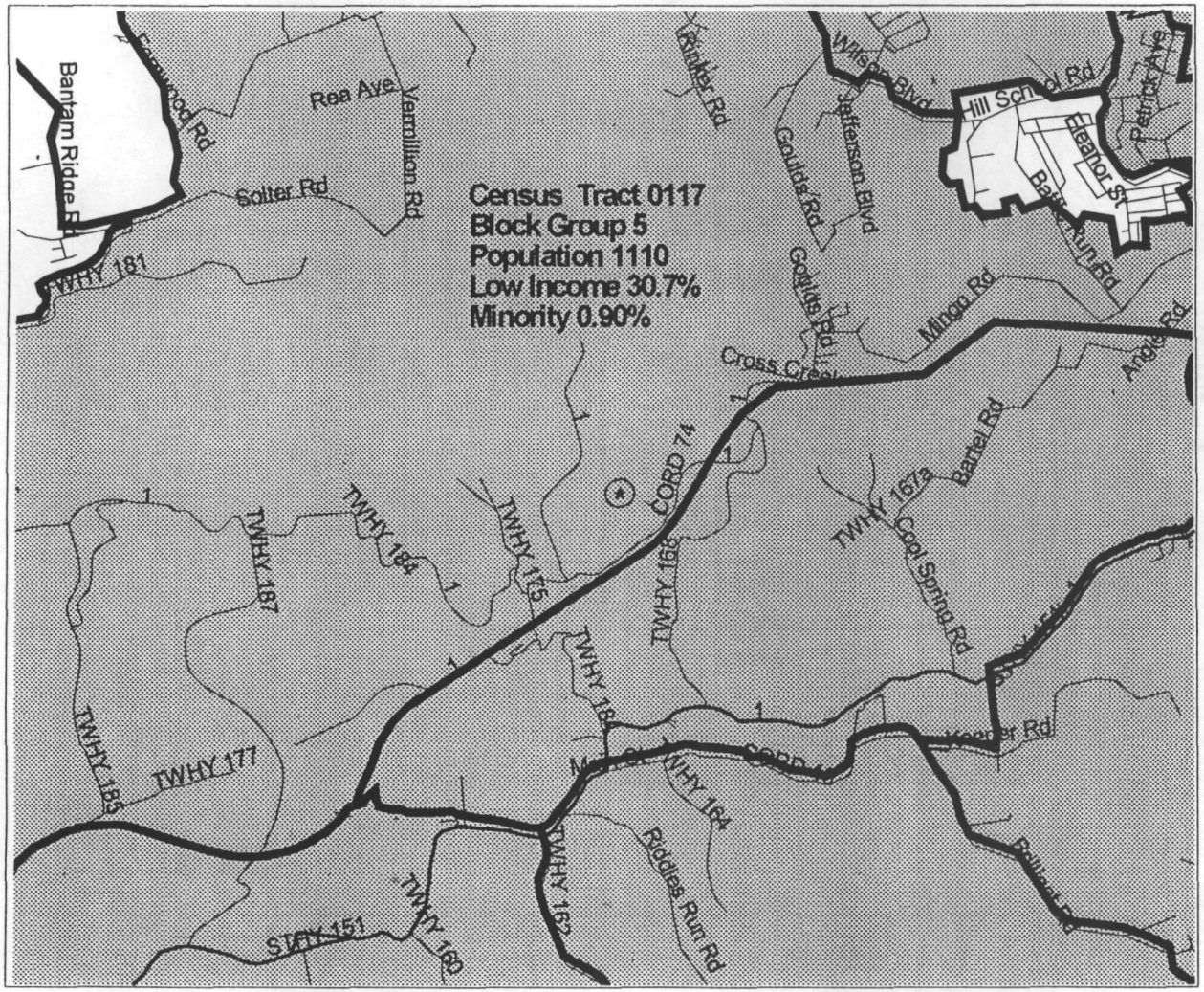
ENFORCEMENT CONFIDENTIAL ADDENDUM
1 - Page

REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

Region 5 Superfund EJ Analysis

Jefferson Processing Site Mingo Junction, OH



0 1 2 3 4 5 Miles

EJ Identification

- Low Income and Minority Less than State Average
- Low Income or Minority at or Greater than State Average
- Low Income or Minority 2 Times or Greater than State Average [meets Region 5 EJ Case criteria]

Site Location

Block Group Boundary

Region 5 EJ Case Criteria for Ohio
Minority: 26% or greater
Low Income: 60% or greater

N

U.S. EPA Region 5

Date of Map:03/29/00

Source of Map: 1990 Census Database

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ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
JEFFERSON PROCESSING SITE
MINGO JUNCTION, JEFFERSON COUNTY, OHIO

ORIGINAL
MAY 25, 2000

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	01/31/00	Ecology and Environment, Inc.	U.S. EPA	Site Assessment Report for the Jefferson Processing Site	63
2	00/00/00	Cook, T., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Determination of Need to Conduct a Time-Critical Removal Action at the Jefferson Processing Site **(PENDING)**	